

AMENDMENTS TO THE CLAIMS

Please amend claims 20 and 23 as shown in the following Listing of Claims.

Listing of Claims

Claims 1-15 (canceled)

Claim 16 (previously presented) A virtual tape stacker comprising:

a server interface adapted to communicate with a server;

a random access data storage device;

a data path adapted to communicate with the random access data storage device; and

a controller configured to transfer data between the server interface and the random access data storage device via the data path;

wherein the controller manages the data on the random access data storage device as a plurality of virtual tape volumes,

wherein the controller defines a virtual tape drive for transferring data between the server and the virtual tape volumes,

wherein the controller defines a sequential order for loading the virtual tape volumes into the virtual tape drive, and

wherein, in response to an eject command from the server, the controller unloads one of the virtual tape volumes from the virtual tape drive and loads a next consecutive one of the virtual tape volumes into the virtual tape drive according to the sequential order.

Claim 17 (previously presented) The virtual tape stacker according to claim 16 further comprising:

a volume management table residing on the random access data storage device and accessible by the controller, the volume management table having pointers to the virtual tape volumes; and

a virtual tape manager residing on the controller that accesses the pointers so as to determine the next consecutive one of the virtual tape volumes.

Claim 18 (previously presented) The virtual tape stacker according to claim 17 further comprising:

a physical tape device; and

a tape cartridge loadable into the physical tape device,

wherein a physical tape volume corresponding to the tape cartridge is integrated into the virtual tape volume storage rotation.

Claim 19 (previously presented) A virtual tape stacker method comprising:
providing a plurality of virtual tape volumes on a random access storage device;
defining a virtual tape drive in a volume management table located on the random access storage device;

identifying the virtual tape volumes in a plurality of data management tables located on the random access storage device;

storing in the volume management table a plurality of pointers to the data management tables so as to identify the location of the virtual tape volumes; and

predetermining an access order for the pointers so as to define a sequential order for loading the virtual tape volumes into the virtual tape drive in response to eject commands from a server.

Claim 20 (currently amended) The virtual tape stacker method according to claim 20 19 further comprising:

- reading one of the pointers according to the access order;
- locating one of the data management tables according to the read pointer; and
- addressing a next consecutive one in the sequential order of the virtual tape volumes according to the located one of the data management tables.

Claim 21 (previously presented) The virtual tape stacker method according to claim 20 further comprising:

- providing a physical tape volume loaded on a physical tape device; and
- integrating the physical tape volume in a storage rotation of the virtual tape volumes.

Claim 22 (previously presented) A virtual tape stacker comprising:
a plurality of virtual tape volumes configured on a random access data storage device;

- a virtual tape drive defined by a controller in communications with the random access data storage device;

- a virtual tape manager configured on the controller so as to transfer data between one of the virtual tape volumes loaded into the virtual tape drive and an application program,

- wherein the virtual tape manager indicates a sequential order for loading a next consecutive one of the virtual tape volumes into the virtual tape drive upon ejection of the loaded one of the virtual tape volumes.

Claim 23 (currently amended) The virtual tape stacker according to claim 22 further comprising:

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a volume management table maintained in the virtual tape manager,

a plurality of pointers to the virtual tape volumes stored in the volume management table,

wherein the sequential order of loading the virtual tape volumes into the virtual tape drive is determined by an access order of the pointers.

Claim 24 (previously presented) The virtual tape stacker according to claim 23 further comprising:

a physical tape volume,

wherein a last one of the virtual tape volumes is previous to the physical tape volume in the sequential access order and a first one of the virtual tape volumes is next from the physical tape volume in the sequential access order.